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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Martin Lund

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EXAMINER

PAN, JOSEPH T

ART UNIT

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2435

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/646,976	Applicant(s) LUND, MARTIN	
	Examiner JOSEPH PAN	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/22/09 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed on March 10, 2009 has been fully considered. Claims 1 and 12 have been amended. Claims 1-24 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7, 10-12, 18, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Authurs et al. (U.S. Patent No. 4,896,934), hereinafter "Authurs", in view of Sawey (U.S. Patent No. 7,151,777 B2).

Referring to claim 1:

i. Authurs teaches:

A method of providing physical port security in a digital communication system, comprising:

receiving a frame of digital data at a network device (see figure 3 'packet format', of Authurs);

a destination port bit map based on the destination address information contained in said frame of digital data (see figure 3, element 'destination bit-map field'; and column 5, lines 50-54, of Authurs);

comparing said destination port bit map with a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated, after said receiving, based on information in said received frame of digital data (see column 5, lines 58-65; column 6, lines 4-9; and column 7, lines 1-3, of Authurs); and

forwarding said frame of digital data to one or more of said allowed destination ports (see figure 1, elements 14-1..14-n 'output ports', of Authurs).

Authurs discloses generating the physical port security bit map. Authurs further discloses the destination port bit map. However, Authurs does not specifically mention generating the destination port bit map.

ii. Sawey teaches a crosspoint switch having multicast functionality, wherein Sawey discloses generating the destination port bit map based on the destination address contained in the frame of the digital data (see figure 4, elements 100 'receive multicast packet', 102 'generate port map mapping multicast address to destination output ports'; and column 7, lines 41-45, of Sawey).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Sawey into the method of Authurs to generate a destination port bit map.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Sawey into the system of Authurs to generate a destination port bit map, because Authurs teaches "The present invention relates to an optical switch for use in a fiber optic telecommunications network, and more particularly, to an optical switch with multicast capability." (see column 1, lines 5-8, of Authurs, emphasis added). Sawey teaches "The present invention relates generally to packet switching and, more particularly, to a crosspoint switch having multicast functionality." (see column 1, lines 6-8, of Sawey, emphasis added). Therefore, Sawey's teaching could enhance Authurs's system.

Referring to claims 7, 18:

Authurs and Sawey teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). Authurs further discloses the router (see column 2, lines 31-33, of Authurs).

Referring to claim 10:

Authurs and Sawey teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). They further discloses the process (see column 1, line 51, of Sawey).

Referring to claim 11:

Authurs and Sawey teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). Authurs further discloses that the bit map is generated dynamically (see column 5, lines 58-65, of Authurs).

Referring to claim 12:

i. Authurs teaches:

A system for providing physical port security, comprising:

At least one processor within a network device, said network device having a communication port for receiving digital data from a digital communications system and two or more physical data ports for forwarding said digital data, said at least one of processor enables (see figure 1, element 10; and column 2, lines 31-33, of Authurs):

a destination port bit map based on destination address information contained in said received digital data (see figure 3, element 'destination bit-map field'; and column 5, lines 50-54, of Authurs);

Comparing of said destination port bit map within a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated, after said receiving, based on information within said received digital data (see column 5, lines 58-65; column 6, lines 4-9; and column 7, lines 1-3, of Authurs); and

Forwarding of said digital data to one or more of said allowed destination ports (see figure 1, elements 14-1..14-n 'output ports', of Authurs).

Authurs discloses generating the physical port security bit map. Authurs further discloses the destination port bit map. However, Authurs does not specifically mention generating the destination port bit map.

ii. Sawey teaches a crosspoint switch having multicast functionality, wherein Sawey discloses generating the destination port bit map based on the destination address contained in the frame of the digital data (see figure 4, elements 100 'receive multicast packet', 102 'generate port map mapping multicast address to destination output ports'; and column 7, lines 41-45, of Sawey).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Sawey into the method of Authurs to generate a destination port bit map.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Sawey into the system of Authurs to generate a destination port bit map, because Authurs teaches "The present invention relates to an optical switch for use in a fiber optic telecommunications network, and more particularly, to an optical switch with multicast capability." (see column 1, lines 5-8, of Authurs, emphasis added). Sawey teaches "The present invention relates generally to packet switching and, more particularly, to a crosspoint switch having multicast functionality." (see column 1, lines 6-8, of Sawey, emphasis added). Therefore, Sawey's teaching could enhance Authurs's system.

Referring to claims 24:

Authurs and Sawey teach the claimed subject matter: an intermediate network device (see claim 12 above). Authurs further discloses that the bit map is dynamically altered based on a variable parameter (see column 5, lines 58-65, of Authurs).

4. Claims 2-5, 6, 8-9, 13-16, 17, 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Authurs et al. (U.S. Patent No. 4,896,934) in view of Sawey

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(U.S. Patent No. 7,151,777 B2), and further in view of Wieget (U.S. Patent No. 6,484,261 B1).

Referring to claims 6, 17, 22:

i. Authurs and Sawey teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). However, they do not specifically mention the IP address.

ii. Wieget teaches a graphical network security policy management wherein Wieget discloses the IP address (see column 2, lines 14 of Wieget).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Wieget into the method of Authurs and Sawey to use IP address.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Wieget into the system of Authurs and Sawey to use IP address, because Authurs teaches using the information provided in a packet to generate a port bitmap (see column 5, lines 58-65, of Authurs). And IP address is the information contained in the packet. Therefore, Wieget's teaching could enhance the system of Authurs and Sawey.

Referring to claims 2, 13:

Authurs, Sawey, and Wieget teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). They further disclose the logical AND (see column 18, line 7 of Wieget).

Referring to claims 3-5, 14-16, 23:

Authurs, Sawey, and Wieget teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). They further disclose the source address and the destination address (see column 2, lines 8-11, of Weight).

Referring to claims 8, 19:

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Authurs, Sawey, and Wieget teach the claimed subject matter: an intermediate network device (see claim 12 above). They further disclose the network file server (see column 10, line 52-55 of Wieget).

Referring to claims 9, 20:

Authurs, Sawey, and Wieget teach the claimed subject matter: an intermediate network device (see claim 12 above). They further disclose the local area network (see column 10, line 52-55 of Wieget).

Referring to claim 10:

Authurs, Sawey, and Wieget teach the claimed subject matter: a method of providing physical port security in a digital communication system (see claim 1 above). They further disclose the process (see column 7, line 62, of Wieget).

Referring to claim 21:

Authurs, Sawey, and Wieget teach the claimed subject matter: an intermediate network device (see claim 12 above). They further disclose the IP data (see column 2, lines 14 of Wieget).

Response to Arguments

5. Applicant's arguments, filed on March 10, 2009, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sawey.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Pan whose telephone number is 571-272-5987.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

/Joseph Pan/

Examiner, Art Unit 2435

May 14, 2009

/Beemnet W Dada/

Primary Examiner, Art Unit 2435